

At least five a week

Evidence on the impact of physical activity
and its relationship to health

A report from the Chief Medical Officer

READER INFORMATION

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Description	A high level DH document that presents the evidence on the relationship between physical activity and health. It is particularly aimed at the NHS, specifically public health and PCTs. The report will set out the latest research evidence of the benefits of physical activity for health. The document is aimed at those concerned with formulating and implementing policies or programmes that utilise the promotion of physical activity, sport, exercise and active travel to achieve health gain.
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Contact Details	Ruth Hallesy Health Improvement and Prevention Wellington House 133-155 Waterloo Road SE1 8UG 020 7972 1366
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Call for action



I highlighted, in my report *Health Check: on the state of public health* in 2002,¹ the growing epidemic of obesity – now a major health concern. Since then, the issue has risen up the public agenda, with considerable media attention on the wider health risks of our sedentary lifestyles in the industrialised 21st century. However, the Government must act on the basis of evidence, and that is why I commissioned this analysis of the scientific evidence on the links between physical activity and health.

In his report *Securing good health for the whole population*,² Derek Wanless proposed a key role for Government in ensuring that the public has proper information on which to take decisions regarding their health. This report provides the evidence on which health professionals and others can advise the public, and it provides a basis for Government intervention to create greater opportunities for children and adults to be more physically active.

The message in this report is clear. The scientific evidence is compelling. Physical activity not only contributes to well-being, but is also essential for good health. People who are physically active reduce their risk of developing major chronic diseases – such as coronary heart disease, stroke and type 2 diabetes – by up to 50%, and the risk of premature death by about 20-30%. The annual costs of physical inactivity in England are estimated at £8.2 billion – including the rising costs of treating chronic diseases such as coronary heart disease and diabetes. This does not include the contribution of inactivity to obesity – an estimated further £2.5 billion cost to the economy each year.

This report must be the wake-up call that changes attitudes to active lifestyles in every household. Being active is no longer simply an option – it is essential if we are to live healthy and fulfilling lives into old age.

The recommendations for physical activity are supported by the scientific evidence. For general health, a total of at least 30 minutes a day of at least moderate intensity physical activity on five or more days of the week reduces the risk of premature death from cardiovascular disease and some cancers, significantly reduces the risk of type 2 diabetes, and it can also improve psychological well-being.

The research demonstrates that the 30 minutes of physical activity necessary for health benefit can be built up in bouts of 10 minutes or more. For example, it can be made up of three 10-minute brisk walks rather than catching the bus for short journeys.

The recommendation for adults of at least 30 minutes of activity a day is for general health. However, it is likely that, for many people, 45-60 minutes of moderate intensity physical activity a day will be needed to prevent obesity.

For children and young people, a total of at least 60 minutes of at least moderate intensity physical activity each day is needed, and at least twice a week this should include activities to improve bone health (activities that produce high physical stresses on the bones), muscle strength and flexibility.

The evidence also clearly demonstrates that achieving the weekly recommendation is not the preserve of the sports enthusiast. We all can and should be more active.

A shift in society's attitudes and behaviour

The evidence of the potential health gains from active lifestyles is clear. We now need a culture shift to achieve these goals. Changing inactive lifestyles and levels of inactivity presents a tremendous public health challenge – a challenge we must rise to if we are to improve health. The solution does not lie in any single innovation. Nor does it lie in advances in

medical science. Current levels of physical activity are a reflection of personal attitudes about time use and of cultural and societal values. They also reflect how conducive our homes, neighbourhoods and environments have become for more inactive living.

A mass shift in current activity levels is needed. This will only be achieved if people see and want the benefits but also if opportunities are created by changing the physical and cultural landscape – and building an environment that supports people in more active lifestyles. If people of all ages can be engaged in a new way of thinking about active lifestyles, better health can be a realistic goal for all. Physical activity needs to be seen as an opportunity – for enjoyment, for improved vitality, for a sense of achievement, for fitness, for optimal weight, and – not least – for health. It needs to be seen as enjoyable, and as fun – not as unnecessary effort. Perceptions also need to be changed – too many people think they are already active enough.

Current action

We are not starting from scratch. Many of these challenges are already receiving serious attention.

Game Plan,³ a strategy for delivering Government's sport and physical activity objectives, jointly published in 2002 by the Department for Culture, Media and Sport and the Prime Minister's Strategy Unit, places a major focus on the health gains that could be achieved through increased participation in physical activity. The Activity Coordination Team – established in 2003 to address these issues, and jointly chaired by Ministers from the Department of Health and Department for Culture, Media and Sport – has engaged departments across Whitehall, at the highest level, towards a coordinated physical activity strategy for England. And in March 2004 the Government's announcement of a White Paper on public health signalled a new commitment to address these issues.

Promoting physical activity is a cross-government issue, and a priority for several departments. Already there is significant investment, at national and local levels, to increase participation in physical activity and more active living, and many schemes are already in place. For example, the Department for Culture, Media and Sport and the Department for Education and Skills are investing heavily in improving physical education and school sport with a goal of increasing opportunities for 5-16 year olds in schools. Department for Transport strategies to support increased cycling and walking will also contribute to an environment that promotes, rather than inhibits physical activity. The health importance of physical activity, exercise and sport, is recognised in the *NHS Plan* and in the National Service Frameworks for the NHS. The Health Development Agency has published reviews of the evidence on effective interventions to address activity (see Appendix 3) as well as obesity.

The future: choosing a more active lifestyle

But more needs to be done. Effective solutions need the engagement of a wide range of agencies. No single organisation will have sufficient impact alone. We will need concerted effort from a range of key partners – Government (at national, regional and local levels), leisure and sports services, schools and colleges, town and regional planners, transport planners and providers, architects, countryside agencies, the NHS and social care, voluntary and consumer groups, employers and the media. All will need to work in a coordinated and comprehensive way to influence the way we live.

The following suggestions provide potential areas for action.

Government

- Government to provide leadership, direction and accountability. Almost all government departments have a role to play.

Regions

- Regional Directors of Public Health to provide leadership, working with others in the regional Government Offices, including Regional Sports Boards and leisure services, transport planners and providers, regional development agencies, and industry, to develop and deliver an evidence-based regional physical activity plan, and monitor progress.

The NHS

- Primary Care Trusts to provide local leadership, working closely with sport, leisure and transport providers, and develop sustainable, cost-effective physical activity strategies in the context of Local Strategic Partnerships – to meet health goals. This could include, for example:
 - building on schemes to encourage people to be more active, such as exercise referral and pedometer initiatives, and providing advice and support on active lifestyles
 - developing creative ways to involve patient populations in more active lifestyles, and
 - working with the local authority and voluntary sector to provide information on local facilities, parks, and cycle and walking routes.

- Health care teams to reappraise the therapeutic value of physical activity for those already suffering from chronic diseases and conditions, including coronary heart disease, obesity, osteoarthritis and low back pain, and depression.

Local authorities and communities

- Local transport plans to give particular consideration to walking and cycling as means of commuting and personal travel.
- Local authorities to take steps to make neighbourhoods and communities more 'activity-friendly' – pleasant and safe for walking, cycling and playing.
- Town planners, architects and engineers to ensure that physical activity is facilitated, and not discouraged, in new buildings, streets, housing developments and schools.

Leisure and sports services

- Leisure services to find ways of attracting and retaining participants of different ages and from different ethnic and socioeconomic backgrounds, and should encourage and enable people to try new activities.
- Leisure and sports bodies to set role models and encourage children to be active for life, not just during childhood.

Schools and colleges

- Education professionals and play leaders to encourage children and young people of all abilities, shapes and sizes to take part in sports and activities that engage them throughout life.
- Walking to school and college to be supported and encouraged.

- Higher education to help train a high-quality, professional workforce as experts in promoting health-enhancing physical activity. This is particularly important for interaction with individuals who are at high risk of chronic disease.

Employers and workplaces

- Employers to encourage active travel to work, and ensure that appropriate facilities, such as showers or secure cycle storage, are available.
- Employers to provide opportunities for activity breaks for their staff, and for exercise and sports, and encourage use of stairs.
- Businesses in the community to set role models and use corporate social responsibility programmes to help promote active lifestyles.

Parents and families

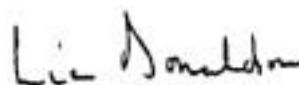
- Parents to encourage children to be active, and set active role models themselves.
- Sedentary, housebound activities to be reduced and more active, outdoor pursuits increased.

References

- 1 Department of Health. *Health Check: on the state of public health. Annual report of the Chief Medical Officer*. London: Department of Health, 2002.
- 2 Wanless D. *Securing good health for the whole population. Final report*. London: Department of Health, 2004.
- 3 Department for Culture, Media and Sport/Strategy Unit. *Game Plan: a strategy for delivering Government's sport and physical activity objectives*. London: Strategy Unit, 2002.

Government, the private sector, local services and the voluntary sector are all key partners. Rising consumer interest in health and activity is apparent from the leisure, health, and sports pages of our media. I have set out just a few examples of how each sector might contribute, but local innovation will be key. Shifts in both environment and attitudes will be vital if we are to fully realise the health benefits of more active lifestyles.

This is a long-term challenge. The complexity and social implications of the challenge call for long-term effort and long-term investment, over at least the next two decades. It has taken around 50 years to halve the prevalence of smoking cigarettes. We now need to set in place key strategies to engender similar changes in physical inactivity.



Professor Sir Liam Donaldson
Chief Medical Officer, Department of Health

Contents

1	SUMMARY	1
2	THE IMPORTANCE OF PHYSICAL ACTIVITY FOR PUBLIC HEALTH	9
3	RECOMMENDATIONS FOR ACTIVE LIVING THROUGHOUT THE LIFECOURSE	21
4	HEALTH BENEFITS OF PHYSICAL ACTIVITY IN CHILDHOOD AND ADOLESCENCE	31
5	THE BENEFITS OF PHYSICAL ACTIVITY FOR ADULT HEALTH	37
5.1	Physical activity and cardiovascular disease	38
5.2	Physical activity, overweight and obesity	45
5.3	Physical activity and diabetes	49
5.4	Physical activity and musculoskeletal health	53
5.5	Physical activity, psychological well-being and mental illness	58
5.6	Physical activity and cancer	64
6	BENEFITS OF PHYSICAL ACTIVITY FOR OLDER ADULTS	67
7	RISKS FROM PHYSICAL ACTIVITY	73
APPENDICES		
1	GLOSSARY	79
2	PREVIOUS ADVICE ON LEVELS OF PHYSICAL ACTIVITY	82
3	INTERVENTIONS TO INCREASE PHYSICAL ACTIVITY AMONG ADULTS	83
4	DEPARTMENT OF HEALTH POLICY ON PHYSICAL ACTIVITY	86
5	METHODS	88
6	ACKNOWLEDGEMENTS	90
REFERENCES		
INDEX		
		119

List of Tables

		page
Table 1	Level and strength of evidence for a relationship between physical activity and contemporary chronic conditions	7
Table 2	Prevalence of activity and inactivity among adults, by sex and age, England, 1998	11
Table 3	Trends in average miles travelled per person per year on foot and by bicycle, England, 1975/76-1999/2001	12
Table 4	Trends in selected leisure-time physical activities, by sex, Great Britain, 1987-96	12
Table 5	Prevalence of activity and inactivity among children, by sex and age, England, 2002	14
Table 6	Intensities and energy expenditure for common types of physical activity	26
Table 7	Levels of physical activity	28
Table 8	How individuals of different age groups can achieve the recommended levels of activity	30
Table 9	Relationships between the different intensities of activities and fitness levels	81
Table 10	Classification of body mass index	81

List of Figures

		page
Figure 1	Schematic representation of the dose-response relationship between physical activity level and risk of disease	17
Figure 2	A lifecourse perspective on the effect of activity on disease risk	22
Figure 3	Hypothetical relationships between physical activity in childhood and health in both childhood and adulthood	23